



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY-DOCKET NO.	CONFIRMATION NO.
10/820,986	04/08/2004	Rey Bravo	LCB420	9039
32915	7590	04/24/2006	EXAMINER	
PANDUIT CORP. LEGAL DEPARTMENT - TP12 17301 SOUTH RIDGELAND AVENUE TINLEY PARK, IL 60477			NEWTON, JARED W	
			ART UNIT	PAPER NUMBER
			3634	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,986	<b>Applicant(s)</b> BRAVO ET AL.	
	<b>Examiner</b> Jared W. Newton	<b>Art Unit</b> 3634	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 16-19 and 23-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**


- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/8/04; 8/13/04.

- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

*Attached  
here to* 

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of Species (a), directed to claims 1-22, in the reply filed on February 6, 2006 is acknowledged.

Applicant further elected without traverse the invention of the apparatus of claims 1-15 and 20-22 by telephone on March 2, 2006. Claims 16-19, directed to a method of using the apparatus set forth in claims 1-15 and 20-22, have been withdrawn. An interview summary form PTO-413 has been included herewith detailing the restriction requirement and election.

***Claim Rejections - 35 USC § 112***

Claims 1, 9, 20, and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, the claims are directed to components. The disclosure and drawings do not describe or clearly set forth said components in such a way that would enable one of ordinary skill in the art to make or use said rack with said components. The Summary and Background of the invention disclose the use with "components"; however, said components are not shown in the drawings or mentioned in the Detailed Description of the invention. It is further unknown if Applicant intends said components

Art Unit: 3634

to be a positive part of the invention, or functionally recited to disclose the intended use of said rack. Appropriate clarification or correction is respectfully requested. It is further noted that any element or combination of elements could comprise a component, and thus the claims have been treated accordingly. No new subject matter should be entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,758,003 to Wheeler et al.

Wheeler et al. disclose a cable management rack comprising: a frame 12; first frame mountable component 30 and second frame mountable component 31, said components comprising fiber optic ports or adapters (see Col. 3, Ln. 50-55); a frame mountable pass through tray or trough 60 disposed on said frame between said first and second components, said trough for routing said cables between said front side of said rack and said rear side of said rack (see FIG. 3); said trough having a base portion 60a,60b,62 for supporting said cables, and being inherently mounted to said frame (see FIG. 6); said trough having a sidewall 64 for retaining said cable on said base 60a,60b,62, wherein said sidewall comprises a bend radius control (see FIG. 6); a rear

Art Unit: 3634

channel 18 for routing cables generally transversely to the direction they take when being routed between said front and rear sides of said rack; said base having an upstanding spool 64 for providing bend radius supports for cables routed between said base of said tray and said rear channel (see FIG. 6).

Wheeler et al. recite, "The distribution troughs 60 are positioned beneath each one of assemblies 30-35, 30'-35' and extend from a front end 60a to a rear end 60b. The ends 60a, 60b are each provided with radius limiters 64 to prevent excessive bending of fibers passing through ends 60a, 60b. Clips 66 retain fibers within the troughs 60. The front end 60a is aligned with the retaining clip 42 beneath each assembly 30-35, 30'-35'. The rear end 60b is open into an aligned rear trough 18. The distribution troughs 60 run perpendicularly to rear troughs 18. Each distribution trough 60 is provided with an individual one of the branch troughs 62. The branch troughs 62 are parallel to the rear troughs 18 and extend from the distribution troughs 60 toward the central trough 20. The branch troughs 62 are connected to and in communication with the distribution troughs 60. At the point of connection of troughs 60,62, radius limiters 70 are provided to prevent excessive bending of fibers passing between the troughs 60,62. The branch troughs 62 terminate spaced from the sidewalls 20a, 20b of central trough 20 as indicated by the distance, D, shown in FIG. 4. At their terminal ends, the troughs 62 are provided with radius limiters including a downwardly turned radius limiter 72." (See Col. 4, Ln.64 – Col. 5, Ln. 20).

Art Unit: 3634

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over '003 to Wheeler et al., alone.

In regard to claims 20-22, the examiner takes official notice that the limitation of a plurality of racks does not carry patentable weight over the rack as set forth by Wheeler et al. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide more than one rack as set forth by Wheeler et al., and to route cables between said racks, as is well known in the art. See *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). The court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

Claims 1-7, 9-14, and 20-22 are rejected under 35 U.S.C. 103(a) as being obvious over US Patent No. 6,614,978 to Caveney, alone.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an

Art Unit: 3634

invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Caveney discloses a cable management rack comprising: a frame 20; first and second frame mountable components 50, said components comprising ports; a frame mountable pass through tray or trough 40 disposed on said frame, said trough capable of routing said cables between said front side of said rack and said rear side of said rack; said trough having a base portion 42 capable of supporting said cables, and being inherently mounted to said frame; bend radius control portions 41 and 43; said tray having a sidewall 44 capable of retaining said cable on said base 42; a rear channel 47 for routing cables generally transversely to the direction they take when being routed between said front and rear sides of said rack (see FIG. 1); rear vertical elevators 90a; and waterfall portions disposed on troughs 49 (see FIG. 5) for routing cables between said rear channel 49 and said rear vertical elevator.

Caveney does not disclose:

- (a) Said tray 40 disposed between said first and second components

Art Unit: 3634

(b) Said waterfalls disposed on said tray

*With respect to (a)*, it would have been obvious to one of ordinary skill in the art at the time of the invention to dispose tray structures 40 between components 50, in place of trough assemblies 49. *With respect to (b)*, it would have been further obvious to one of ordinary skill in the art at the time of the invention to provide the waterfall portions of the trough assemblies 49 on the tray portion 40. The motivation for providing the trays 40 with waterfalls and between pairs of components would be to better organize the cable routing. The tray allows cables to be easily passed from one side of the rack to another. As set forth by Caveney, this provision is useful and desirable at the bottom portion of said rack. It would be an obvious improvement to the rack as set forth by Caveney to provide similar trays in place of the troughs 49, so as to allow for more simplified and effective cable management.

With respect to claims 20-22, Caveney discloses the rack as set forth above, and further shows use with a plurality of racks (see FIG. 8).

Claims 6, 7, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over '003 to Wheeler et al. as applied to claims 1 and 9 above, and further in view of US Patent No. 6,365,834 to Larsen et al.

Wheeler et al. discloses the rack as set forth above in accordance with the limitations of claims 1, 2, 5, 9, and 12, but does not disclose waterfall portions or rear vertical elevators.



Larsen et al. discloses a cable management rack comprising waterfall portions and a rear vertical elevator (see FIG. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rear portions of the rack as set forth by Wheeler et al. with the waterfall portions and elevator as set forth by Larsen et al. The use of said waterfall portions and rear elevators are well known in the art, and would be an obvious improvement to the rack as set forth by Wheeler et al., by providing bend radius control at the end of said trough portions, and cable guidance and retention at the rear of the rack.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared W. Newton whose telephone number is (571) 272-2952. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JWN  
March 6, 2006



RICHARD E. CHILCOT, JR.  
SUPERVISORY PATENT EXAMINER